

JP9 - 2000 - 0016  
1 / 12

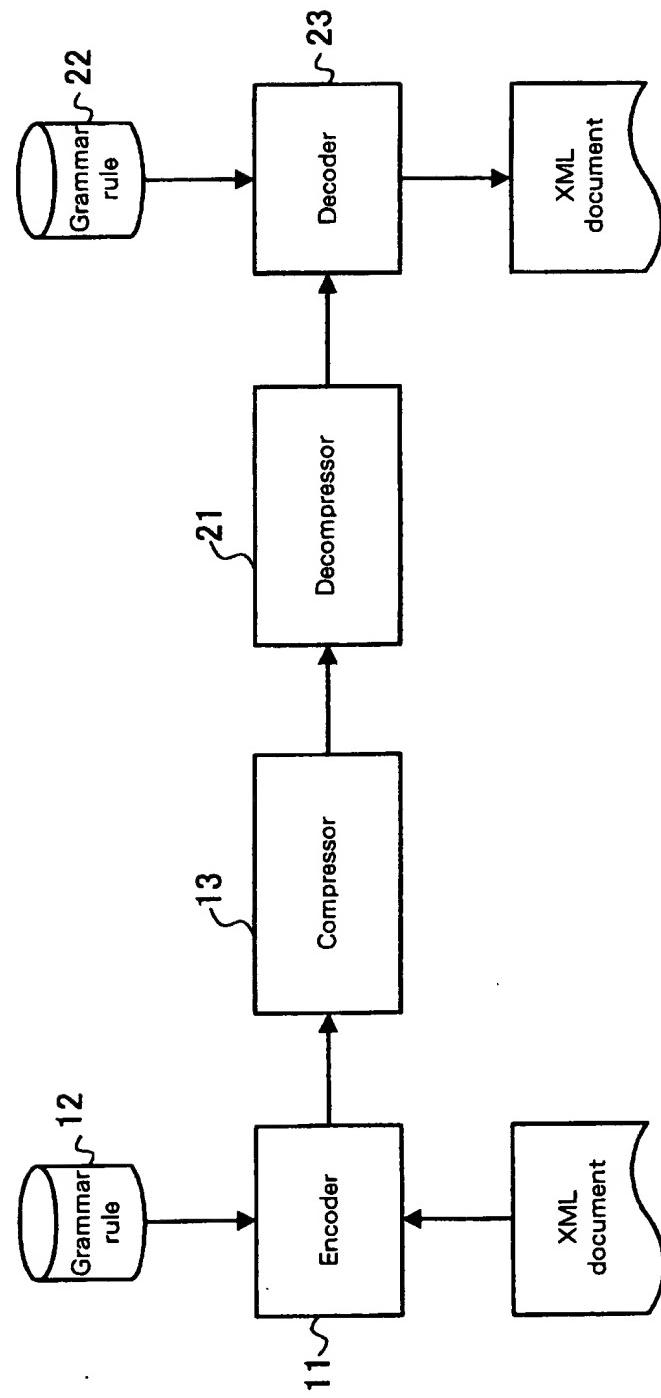


Fig. 1

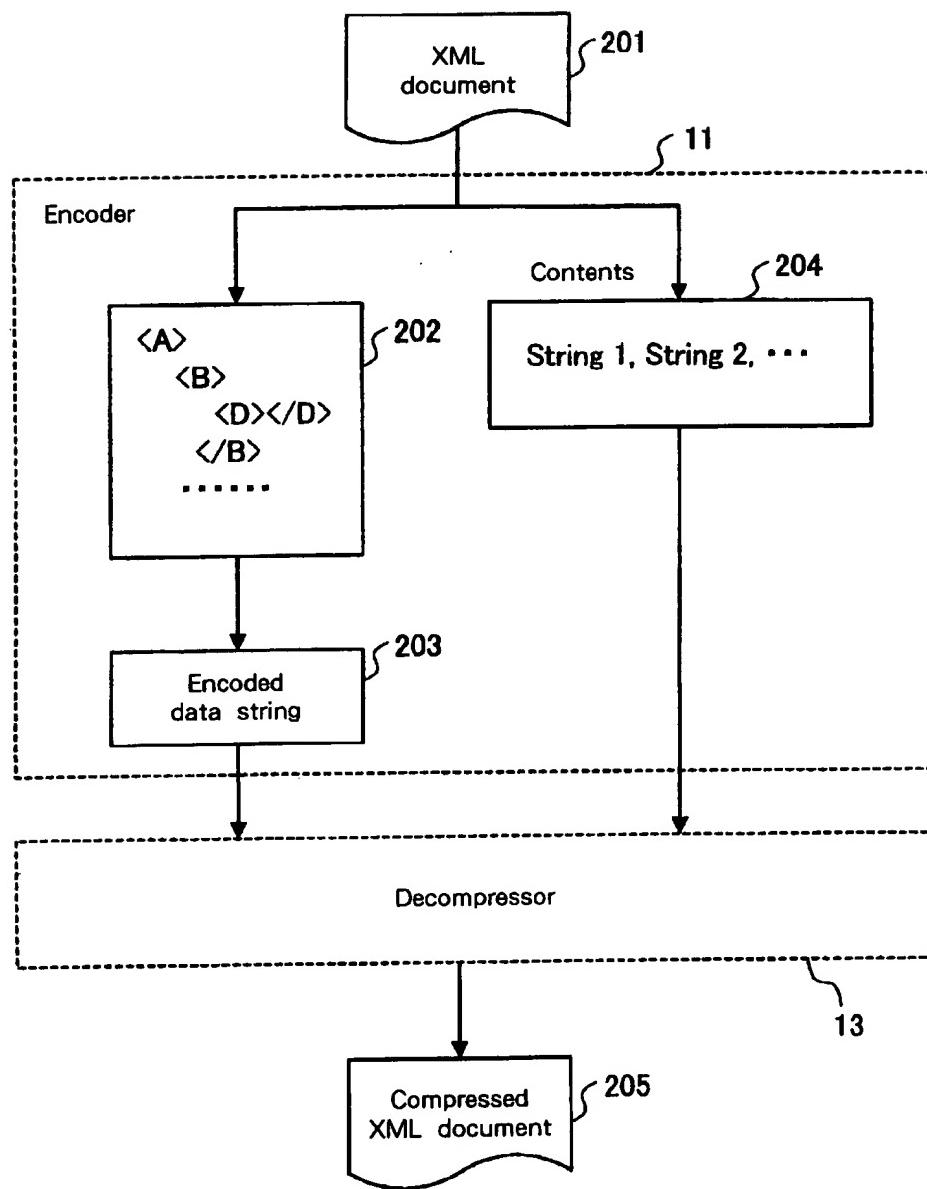


Fig. 2

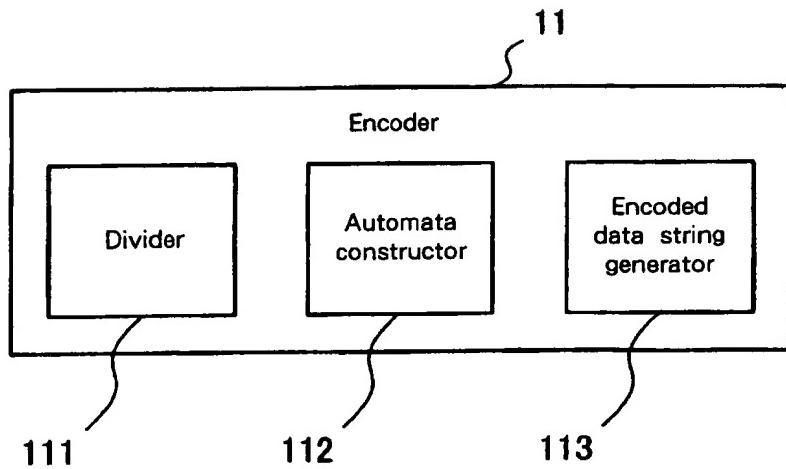


Fig. 3

```
<?xml version="1.0"?>
<!DOCTYPE department SYSTEM "sample.dtd">
<A>
  <B>
    <D>String1</D>
  </B>
  <C>
    <E>
      <G>String2</G>
    </E>
    <F>
      <G>String3</G>
    </F>
    <E>
      <H>
        <G>String4</G>
      </H>
    </E>
  </C>
</A>
```

Fig. 4

```
<?xml version="1.0"?>
<!DOCTYPE department SYSTEM "sample.dtd">
<A>
  <B>
    <D></D>
  </B>
  <C>
    <E>
      <G></G>
    </E>
    <F>
      <G></G>
    </F>
    <E>
      <H>
        <G></G>
      </H>
    </E>
  </C>
</A>
```

Fig. 5

```
<ELEMENT A (B, C)>
<ELEMENT B (D)>
<ELEMENT C (E|F)*>
<ELEMENT E (G|H)>
<ELEMENT F (G)>
<ELEMENT H (G)>
<ELEMENT D (#PCDATA)>
<ELEMENT G (#PCDATA)>
```

Fig. 6

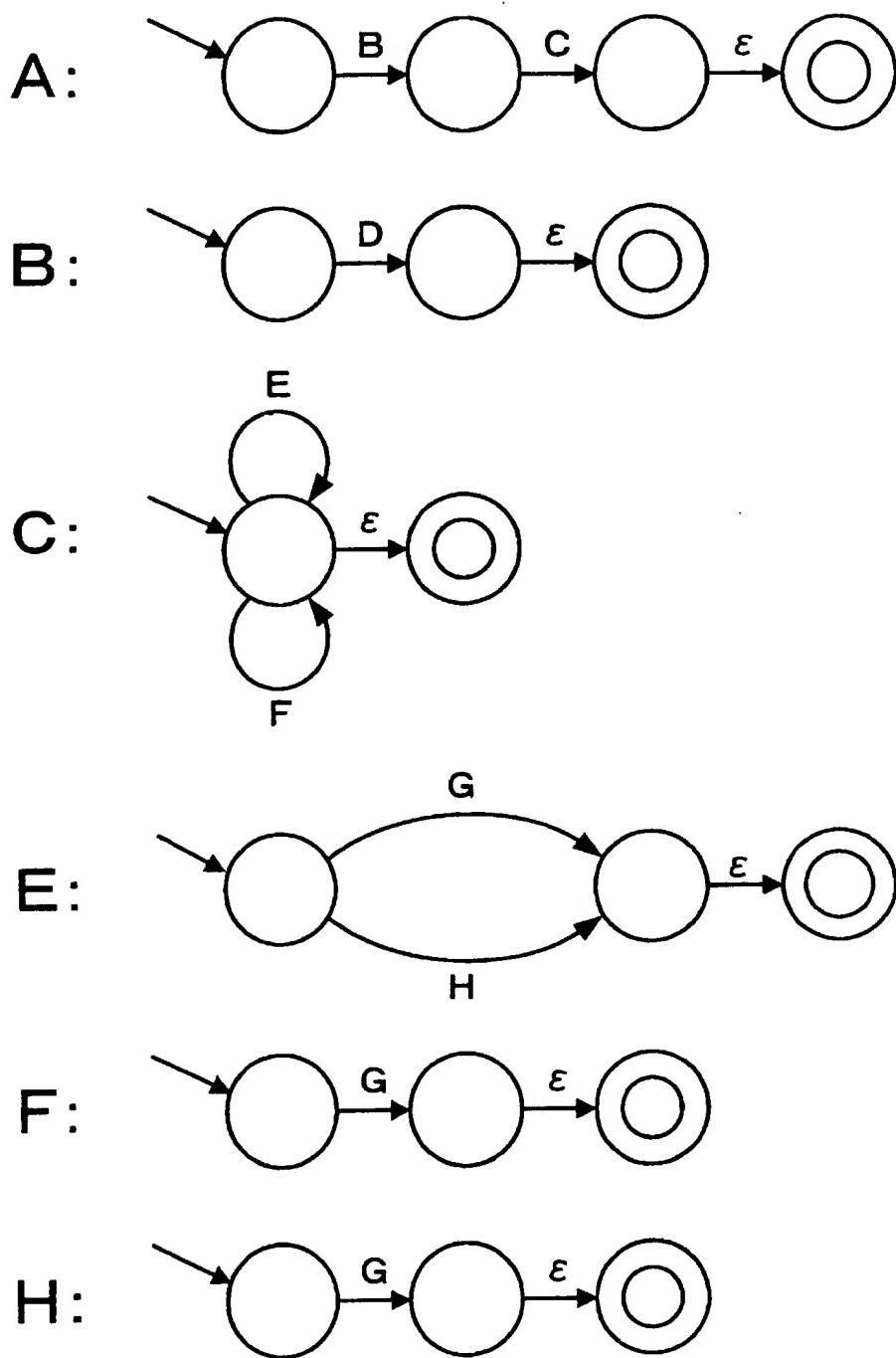


Fig. 7

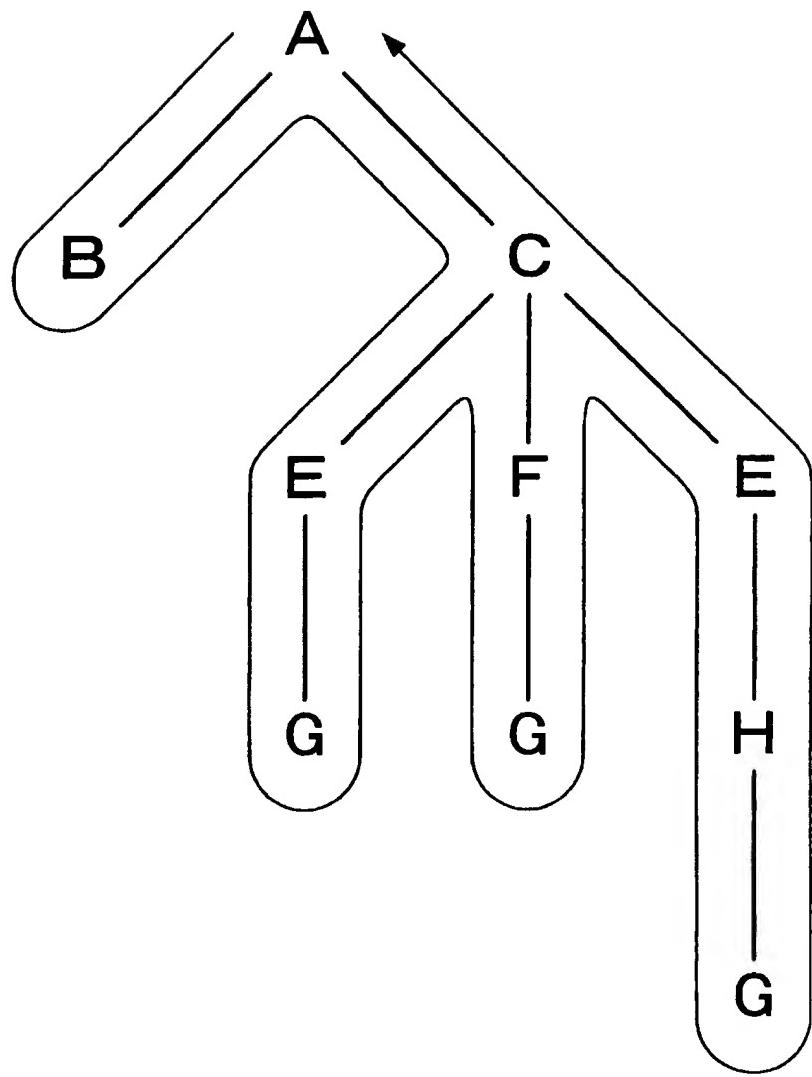


Fig. 8

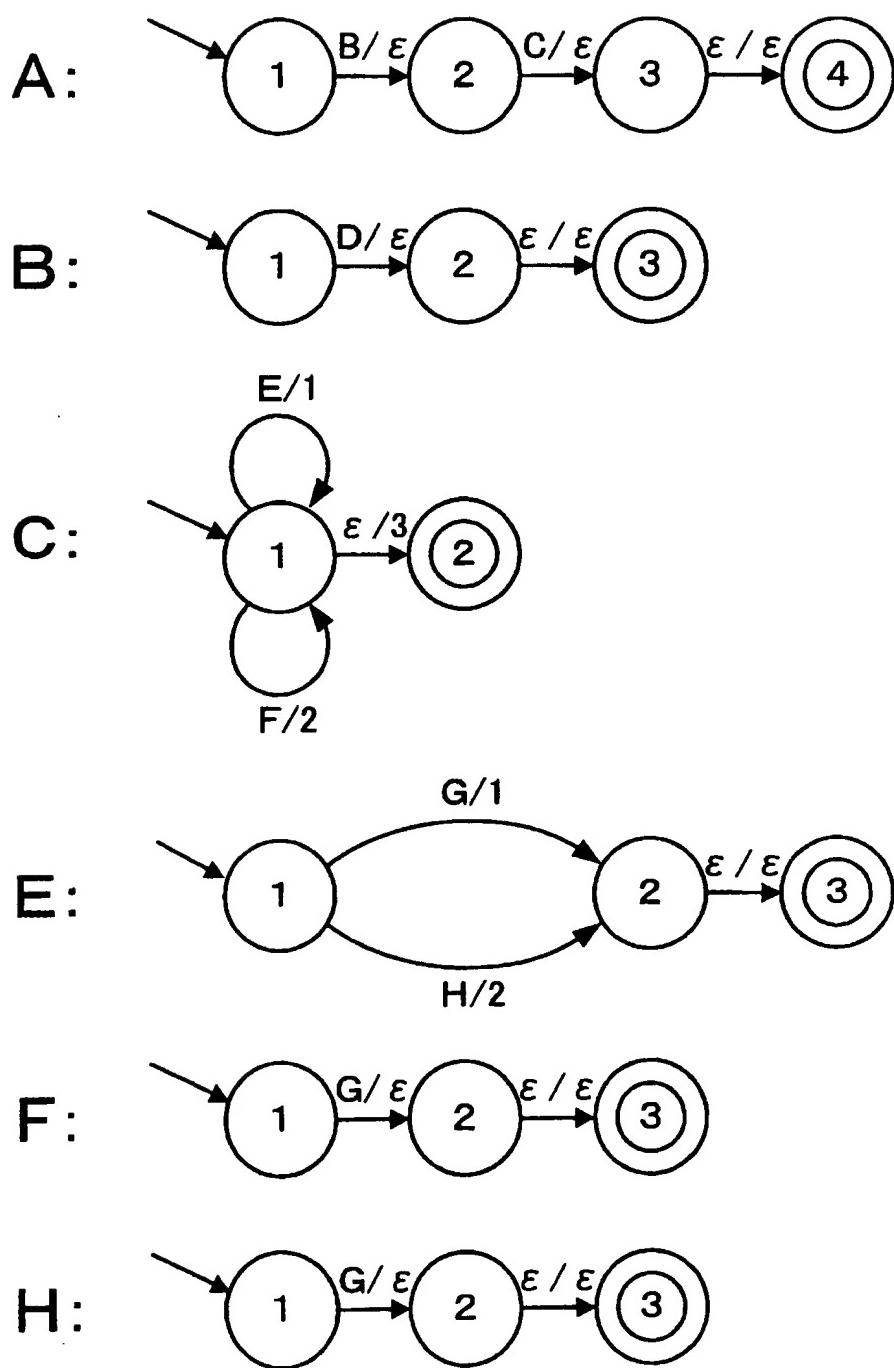


Fig. 9

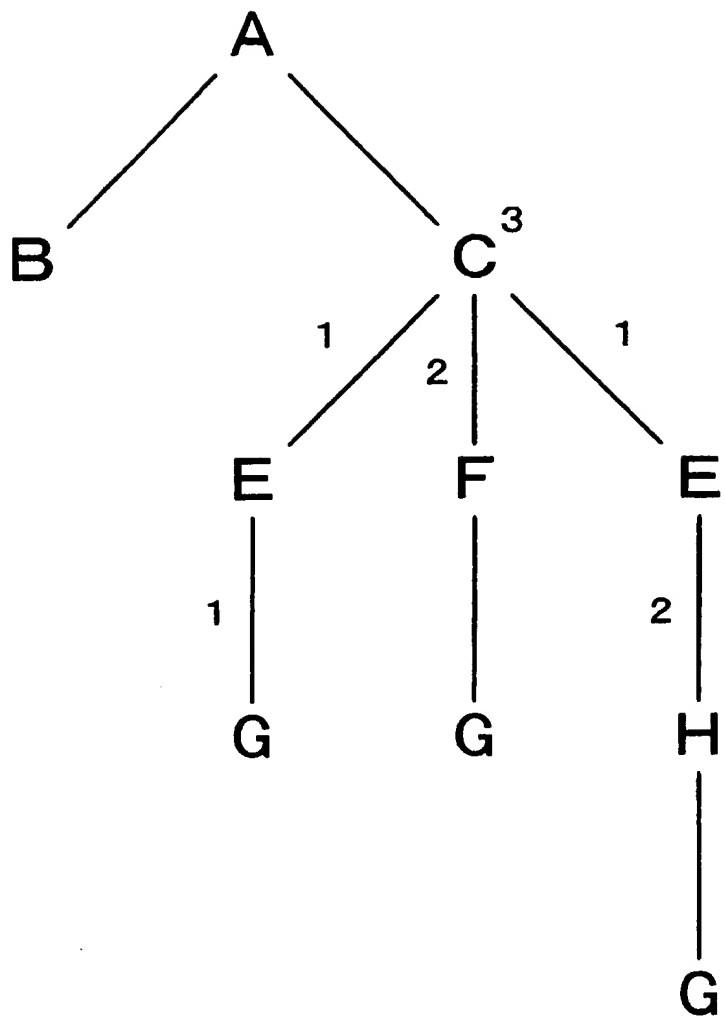


Fig. 10

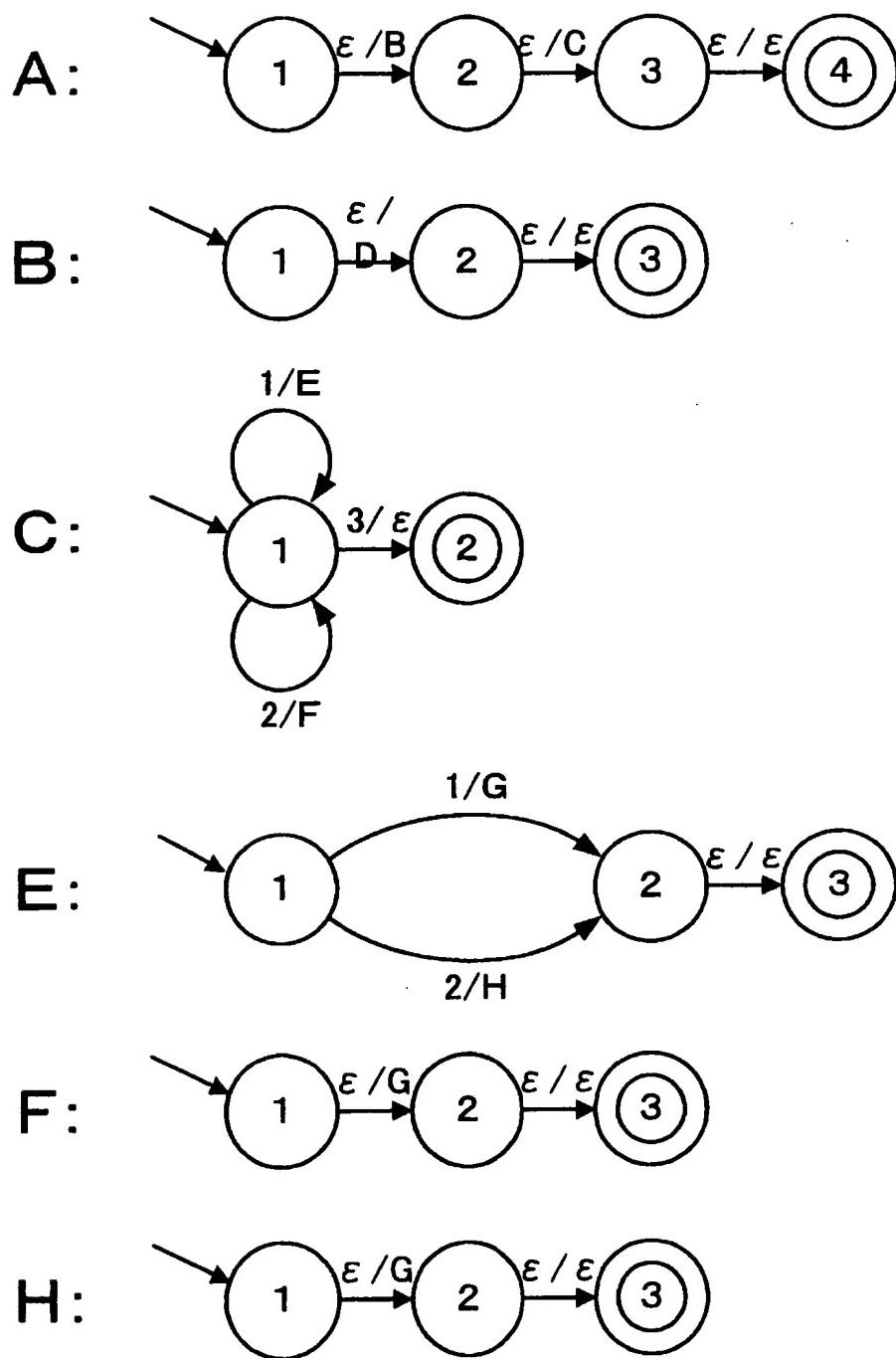


Fig. 11

JP9 - 2000 - 0016  
10/12

D T D

Before conversion	After conversion
<pre>&lt;!ELEMENT department (employee)*&gt; &lt;!ELEMENT employee (#PCDATA)*&gt; &lt;!ATTLIST employee name CDATA #REQUIRED&gt; &lt;!ATTLIST employee serialNo CDATA #IMPLIED&gt; &lt;!ELEMENT manager (#PCDATA)*&gt; &lt;!ELEMENT name (#PCDATA)*&gt; &lt;!ELEMENT email (#PCDATA)*&gt;</pre>	<pre>&lt;!ELEMENT department (employee)*&gt; &lt;!ELEMENT employee (#PCDATA)*&gt; &lt;!ELEMENT serialNo (#PCDATA)*&gt; &lt;!ELEMENT manager (#PCDATA)*&gt; &lt;!ELEMENT name (#PCDATA)*&gt; &lt;!ELEMENT email (#PCDATA)*&gt;</pre>

Fig. 12

XML document

Before conversion	After conversion
<pre>&lt;department serialNo="012345" manager="yes"&gt;   &lt;name&gt;aaaaa&lt;/name&gt;   &lt;email&gt;mail@address. com&lt;/email&gt; &lt;/department&gt;</pre>	<pre>&lt;department   &lt;serialNo&gt;012345&lt;/serialNo&gt;   &lt;manager&gt;yes&lt;/manager&gt;   &lt;name&gt;aaaaa&lt;/name&gt;   &lt;email&gt;mail@address. com&lt;/email&gt; &lt;/department&gt;</pre>

Fig. 13

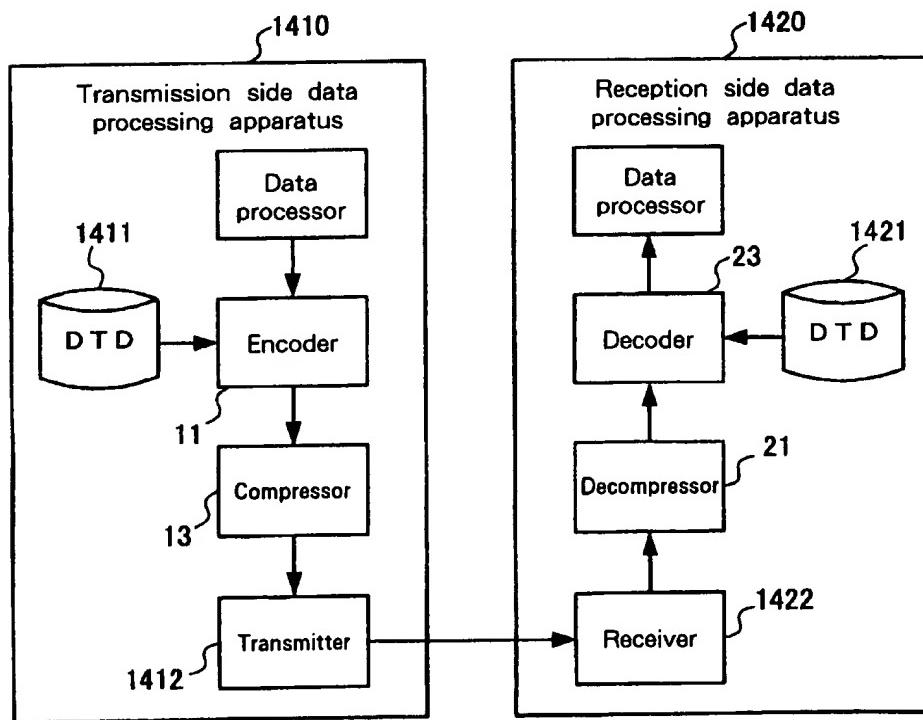


Fig. 14

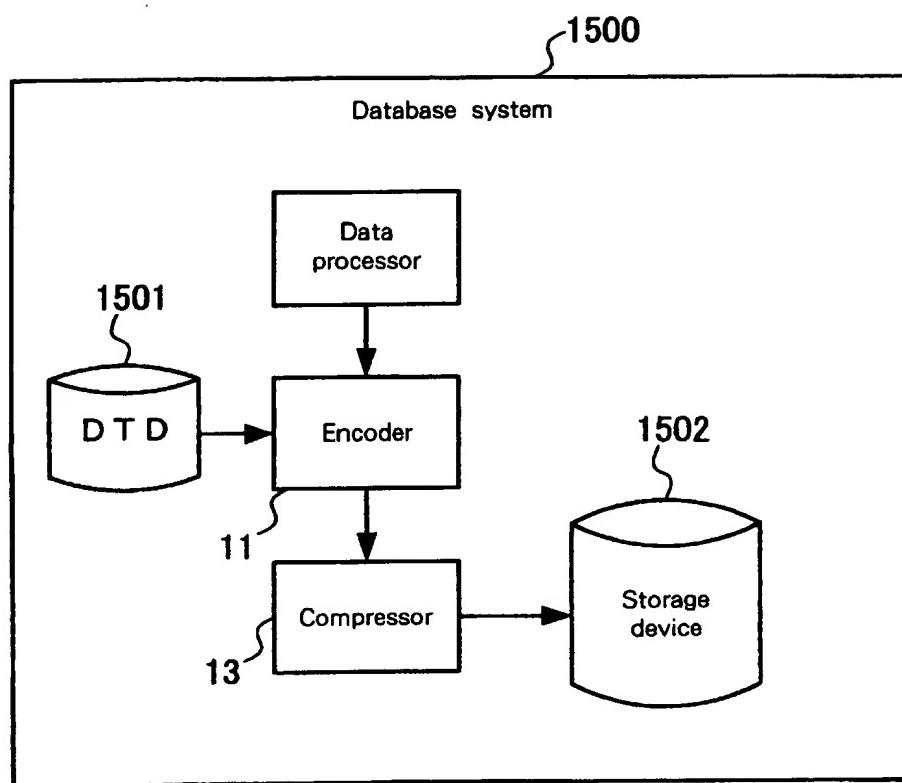


Fig. 15